

REMARKS

Status of the Claims

- Claims 1-24 are pending in the Application after entry of this amendment.
- Claims 1-24 are rejected by Examiner.

Claim Rejections Pursuant to 35 U.S.C. §103 (a)

Claims 1-3, 5-6, 10-18, 22 and 23 stand rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,187,786 to Densmore et al. in view of U.S. Patent No. 6,519,594 to Li.

Concerning the above mentioned claims, the Examiner states in the present office action that Densmore et al. does not explicitly teach a level of indirection from application programming interfaces used by a class locator, the wrapper indirection level providing for different caches to be used for the selected elements. Applicant agrees with the Examiner on this point. However, the Applicant respectfully disagrees that Li teaches the missing limitations.

Li teaches a class management model for minimizing the amount of memory required for storing and maintaining Java classes through class sharing and for providing mapping model to map different physical devices using their own file systems and file management APIs. (Li, Col. 7 lines 66 through col. 8 lines 3). Li teaches a shared memory pool (SMP) into which a Java Virtual Machine (JVM) can store and register a particular Java class for subsequent use by itself or by other JVMs. Li teaches that a stored and registered Java class is accessible by other JVMs using the SMP and a Java layer class manager (JCM) that is implemented in software. The JCM requires other JVMs to access a key for the stored class in order to synchronize access to the Java class among several installed and operating JVMs of the computer system. (Li, col. 2, line 65 through col. 3 line 6). If a JVM wants to access the stored Java class in the shared memory pool 280, then it must first obtain the lock associated with the desired Java class. (Li, Col. 8 lines 29-32). If a JVM wants to share a class, it first checks with the JCM 270 which then references a name table and the lock for the class. The JCM 270 then forwards the address of the class to the requesting JVM when the lock is free. The JVM can then access the shared Java class. (Li, col. 8 lines 50-55).

Li teaches a communication method which allows multiple JVM applications to communicate using the shared memory pool. (Li, Abstract). Resources that are shared 140 include hardware devices, methods, memory and Java classes that are stored in memory (e.g., the shared memory pool). Communication 145 is performed using the Dispatcher, Java Native Interface (JNI) and a Wrapper. At the bottom layers are located an operating system (OS) 150, e.g., the AperiOS AV/OS, and a device driver 155. Applicant notes that the wrapper is used for communications purposes and the “wrapper” not further discussed in detail in Li.

Claim 1 recites in relevant part;

...creating a wrapper for selected elements in the class path to provide a level of indirection from application programming interfaces used by a class locator, the wrapper indirection level providing for different caches to be used for the selected elements;
requesting a search of the class path via the wrapper...

Li does not disclose creating a wrapper to provide a level of indirection where the wrapper provides for different caches to be used. Instead, Li teaches a single shared memory pool that allows a reduction of memory required for storing and maintaining Java classes. Li requires other Java class managers to access a key for the stored class in order to synchronize access to the Java class among several installed and operating Java machines of the computer system. Li mandates that if a Java machine wants to access the stored Java class in the shared memory pool, then it must first obtain the lock associated with the desired Java class. Applicant notes that Claim 1 of the present application does not require a single stored memory pool, does not require a key for operation and does not mandate that a lock be associated with a class. Since Li teaches a single memory pool instead of different caches, Applicant submits that Li teaches away from the present invention.

Neither Densmore et al. nor Li teach or suggest a wrapper to provide a level of indirection from application programming interfaces used by a class locator, the wrapper indirection level providing for different caches to be used for selected elements as in Claim 1. Consequently, neither Densmore et al. nor Li, either alone or in combination, can render independent Claim 1 obvious.

Similarly, independent Claims 5, 10, 15, 17, 22 and 23 recite the elements of a wrapper that provides a level of indirection and the use of multiple caches. As mentioned

above, neither Densmore et al nor Li, either alone or in combination teach or suggest these elements in the recited combination.

Applicant therefore respectfully traverses the current 35 U.S.C §103(a) rejection for the above stated reasons and submits that independent Claims 1, 5, 10, 15, 17, 22 and 23 and corresponding dependent Claims 2-4, 6-9, 11-14, 16, 19-21 and 24 are in a condition for allowance.

Currently, Claims 4, 7-9 and 19-21 also stand rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,187,786 to Densmore et al. in view of U.S. Patent No. 6,519,594 to Li and in further view of U.S. Publication No. US 2002/0042833 to Hendler et al. Applicant respectively traverses.

In addition to the above failure of Densmore et al. and Li to teach the recited claim elements, Applicant notes that Hendler et al. is a continuation in part application with a filing date of 12/29/2000; which is after the 3/11/1999 filing date of the present Application. The Examiner relies on paragraphs 0067-0068 of the Hendler et al. publication which is new matter in the Hendler et al. continuation in part application and thus this new matter merits the filing date of 12/29/2000 and not the filing date of the parent application. Therefore, Hendler et al., with a filing date of 12/29/2000 is not prior art to Claims 4, 7-9 and 19-21.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw all claim rejections under 35 U.S.C. §103(a) for Claims 1-24 for the present application.

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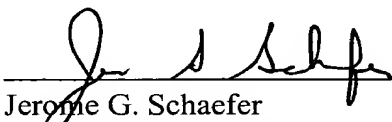
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Conclusion

Applicant respectfully request reconsideration of the subject application in light of the remarks presented above. A Notice of Allowance for all pending claims is earnestly solicited.

Respectfully Submitted,

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